

中国梅花草属 (*Parnassia*) 的新植物

SOME NEW PLANTS OF CHINESE *PARNASSIA*

簡焯坡

(中国科学院植物研究所)

JIEN ZHUO-PO

(Institute of Botany, Academia Sinica)

宝兴梅花草 新种 图版三十三, 1, 图 1—8

植物矮小, 包括花梗高 5—12 厘米。根状茎伸长, 柔弱, 具多数长丝状根。茎常分枝; 具密或稀叶, 但靠近顶部和茎分枝处经常具密集的叶。花梗纤细, 每一枝具一梗, 腋生, 长 1.5—8.5 厘米, 约在中部具一苞片, 苞片小, 长约 2 毫米, 近乎无柄, 菱状椭圆形, 具托叶。叶具长而细弱的叶柄; 叶片薄坚纸质, 菱形, 扁菱形, 近圆状、卵状或倒卵状菱形, 长约 2—3 毫米, 顶端微钝, 常具小细尖, 基部向叶柄楔状消失, 具五脉, 叶脉在上面不显著, 背面显著而弧曲; 叶柄扁平, 宽 0.4 毫米, 向基部扩大并在基部具托叶, 叶柄比叶片长 1.5—3 倍。花萼直径 3—4 毫米, 萼片平展, 披针状长圆形, 长 3 毫米, 宽 1 毫米, 单脉, 具密集的小褐点, 全缘, 顶部极为急尖, 靠近基部明显地连生为长 1 毫米的短管, 在萼片之间具有黑色短发状附属物。花冠白色, 直径 5—10 毫米, 花瓣平展超过萼片近乎两倍, 长 5 毫米, 宽 3 毫米, 卵状椭圆形或宽椭圆形, 全缘, 具褐点, 三脉, 基部近圆形, 骤然收缩为长 1 毫米的显著的爪。雄蕊与花瓣等长, 花丝略扁平, 丝状, 向下端逐渐扩大, 花药椭圆形, 长 0.8 毫米, 侧裂, 雕落。退化雄蕊长 2 毫米, 具小红点, 比萼片略短, 具纤细而长的柄, 上部具膨胀头状的似二唇状物, 前方裂片不分裂, 呈棒棍状头状, 稍肥厚扁平, 宽舌状, 后方裂片薄, 扁平, 分裂成 2—5 小裂片, 小裂片直立, 指状, 分裂至中部或更深, 顶部尖。子房卵状, 几乎全部上位; 花柱明显, 为子房长度之 $\frac{1}{2}$ 至 $\frac{1}{4}$, 稀极短不明显; 柱头 3 稀 4, 明显, 长椭圆形或倒卵形, 直立, 最后平展。胎座 3, 稀 4, 线形, 几乎在整个纵长上具有胚珠。蒴果卵形, 长 3 毫米(成熟者), 与萼片等长。

对于 *Cladoparnassia* 组增加了本新种是很有意思的, 它采自四川省宝兴县, 该地位于本组唯一已知的另一种 *P. faberi* Oliver 的产地峨眉山的西北方约 100 公里处。它与 *P. faberi* Oliver 的主要区别在于: 叶片小, 菱形, 叶柄长, 具托叶、花萼裂片较深和退化雄蕊为直立“二唇形”(由二裂片所组成, 其中一裂片不分裂, 另一裂片则具 2—5 小裂片)。本种的总花梗从茎或分枝近顶端处的叶腋生出; 由于该部位的叶片甚小、密集、并且发育不良, 因此总花梗宛如着生于顶端。

Parnassia labiata sp. nov. Pl. XXXIII, 1, fig. 1—8

(Sect. *Cladoparnassia* Engl.)

Planta pumila, cum pedunculis 5—12 cm. alta. Rhizoma elongatum tenerum, radicibus numerosis longis filiformibus praeditum. Caulis saepe ramosis densiuscule parceve foliatis sed apicem versus et prope furcationem caulis semper densissime foliatis. Pedunculus gracilis, pro ramo singulus, axillaris, 1.5—8.5 cm. longus, circa medium bracteae solitariae minutae ca. 2 mm. longae subsessilem rhomboideo-ellipticam stipulatam gerens. Folia longe et tenuiter petiolata, laminis tenuiter chartaceis, rhomboideis, depresso-rhomboideis, rotundato-ovato-vel obovato-rhomboideis, ca. 2—3 mm. longis et latis, obtusiusculis, saepe minute apiculatis, basi in petiolum cuneatim desinentibus, quinquenerviis, nervis supra inconspicuis, subtus prominentibus arcuatis, petiolo plano, 0.4 mm. lato, ad basin dilatato et basi stipulato, lamina 1.5—3 plo longiori. Calyx diametro 3—4 mm., sepalis patentibus, lanceolato-oblongis, 3 mm. longis, 1 mm. latis, uninerviis, dense fusco-punctulatis, margine integerrimis, apice acutissimis, versus basin in tubum brevissimum scil. 1 mm. longum connatis, processum parvum capillarem nigricantem inter sepalos gerens. Corolla alba diametro 5—10 mm., petalis patentibus, sepala subduplo superantibus, 5 mm. longis 3 mm. latis, ovato-ellipticis vel late ovatis integerrimis, fusco-punctatis, trinerviis, basi rotundatis, in unguem distinctum 1 mm. longum abrupte contractis. Stamina petala aequilonga, filamentis complanato-filiformibus, deorsum sensim dilatatis, antheris ellipticis 0.8 mm. longis, lateraliter dehiscentibus, delapsis. Staminodia 2 mm. longa, rufo-punctulata, calyci paulo breviora, graciliter et longe stipitata, superne inflato-capitata quasi bilabiata, lobo interiore simplici, clavato-capituliformi vel crassiuscule appianato, late liguliformi, exteriori tenui plano, in lobulos 2—5 erectos digitiformes, ad medium vel ultra partito. Ovarium ovoideum, fere omnino superum, stylo saepe conspicuo elongato, dimidium usque quartam partem ovarii aequanti, raro inconspicuo brevissimo, stigmata 3, raro 4, conspicua, oblonga vel erecta demum patentia gerenti. Placentae 3, raro 4, linearis, per totam fere longitudinem ovula portantes. Capsula maturitate ovoidea calycem aequans, 3 mm. longa.

Habitat: On the grassy slope in the mountain (about 1000 m. alt.) of western Szechuan Province.

Specimens examined: Szechuan, Pao Shing Hsien (宝兴县), Chiao Chang Gou (教场沟) (about 30°20' N, 102°48' E), T. H. Tu (杜大华) 4842, Oct. 26, 1933—holotype conserved in the Herb. Inst. Bot. Academia Sinica; same locality, K. L. Chü (曲桂龄) 3635, 1936; same locality, K. L. Chü 3937, 1936.

This new species is a very interesting addition to the Section *Cladoparnassia* Engl. and is collected from Pao Shing Hsien of Szechuan Province about 100 km. northwest of Mt. Omei, where *Parnassia Faberi* Oliver, the only known species in this section, is found. The small rhomboideous leaf-blades with long petioles, deeper calyx-lobes, and the erect "bilabiate" staminodes with one lobe simple and the other deeply 2—5 lobulate, are the chief points in which this differs from *Parnassia Faberi* Oliver. The peduncle rises from the leaf-axil near the top of a stem or of a branch, where the leaves are so small, crowded, and not well-developed, that the peduncle seems as if terminally seated.

喜沙梅花草 新变种 图版三十三, 1, 图 9

本变种与正种之区别在于植物较高大, 高达 18—24 厘米; 茎叶通常位居中部以上; 基部叶圆形, 叶基部非心脏形, 有时微楔形。

***Parnassia davidii* Franch. var. *arenicola* var. nov. (Pl. XXXIII, 1, Fig. 9)**

A type differt planta altiore usque ad 18—24 cm. attingenti, folio caulino supra medium posito, et foliis basilaribus orbiculatis sed basi non cordatis, interdum leviter cuneatis.

Type: Szechuan, Wan Hsien (万县), (about 30°30'N, 108°35'E), on the sandy shore along the Yang-tze River. T. P. Wang (王作宾) 12123—holotype conserved in the Herb. Inst. Bot. Academia Sinica.

中国梅花草峨眉变种 新变种 图版三十四, 图 9—15

本变种与正种之区别在于基生叶叶片卵状肾形, 具 5—7 脉; 花瓣边缘除顶部及爪部外具撕裂状、流苏状纤毛, 爪部短, 长约 1.2 毫米和宽约 1 毫米, 白色; 花柱比子房略短, 柱头 3, 平展, 顶端截形。

***Parnassia chinensis* Fr. var. *szechuanensis* var. nov. (Pl. XXXIV, Fig. 9—15)**

A type differt laminis foliorum basium ovato-reniformibus nerviis 5—7, petalis margine lacerato-fimbriato-ciliatis nisi ad apicem et unguem brevem ca. 1.2 mm. longum 1 mm. latum, albis (e nota collectoris), stylo ovario paulo brevior, stigmatibus tribus, patentibus, apice truncatis.

Habitat: On the grassy slope, on the margin of the shrubby thicket, or on the road side in the mountain (3100—3300 m. alt.) of western Szechuan Province.

Specimens examined: Szechuan, Mt. Omei (峨眉山), Chin Ting (金顶) (about 29°39' N, 103°49' E), T. H. Tu (杜大华) 612, Aug. 15, 1935—holotype conserved in the Herb. Inst. Bot. Academia Sinica; same locality, W. P. Fang (方文培) 20407, Aug. 2, 1951; Mt. Omei, F. T. Wang (汪发荣) 23460, Aug. 1931; Mt. Omei, Ming Yue An (明月庵), C. H. Hsiung (熊济华) 31771, July 24, 1952; same locality, C. H. Hsiung 31815, July 7, 1952; Mt. Omei, C. H. Hsiung 32641, 1952; Pao Shing Hsien (宝兴县) (about 30°20' N, 102°48' E), K. L. Chü (曲桂龄) 2609; without locality, T. H. Tu 250.

云南梅花草长柄变种 新变种 图版三十四, 图 1—8

退化雄蕊长, 扁平, 长约 1.5 毫米, 柄线形或略宽, 约 1 毫米长, 0.2—0.5 毫米宽, 曲线成片部; 片部斧形, 全缘或呈退化的三浅裂; 裂片顶部具蜜腺, 宽约 0.8 毫米, 长为退化雄蕊全长之 $\frac{1}{3}$ 。花萼裂片顶端密具红褐色小点。花冠白色。花柱之长仅达子房之 $\frac{1}{3}$ — $\frac{1}{2}$ 。

***Parnassia yunnanensis* Fr. var. *longistipitata* var. nov. (Pl. XXXIV, Fig. 1—8)**

Staminodia longa, plana, circ. 1.5 mm. longa, e stipite longo angusto-lineari vel latiusculo circ. 1 mm. longo 0.2—0.5 mm. lato curvatim dilatata in laminam malleiformem integerrimam vel nunc obsolete trilobam vertice nectariferam circ. 0.5 mm. longam circ. 0.8 mm. latam tertiam partem totius longitudinis aequantem. Calyx segmentis apice punctulis rufo-fuscis dense adpersis. Corolla alba. Stylus conspicuus longitudine vix ovarii $\frac{1}{3}$ — $\frac{1}{2}$ aequans.

Habitat: On grass land in the mountain (3000—3300 m. alt.) of western Szechuan Province.

Specimens examined: Szechuan, Kan Ting (康定), Mt. Che To (折多山) (about 30°06' N, 101°71'

E) C. S. Liu (刘式民) 1028, Aug. 6, 1934—holotype conserved in the Herb. Inst. Bot. Academia Sinica; same locality, C. S. Liu 883, July 25, 1934.

The specimen of C. S. Liu no. 883 bears shallow but distinct three-lobed staminodes, acutish petals, and yellowish green corolla (according to the collector's note.)

俞氏梅花草 新种 图版三十三, 2, 图 1—6

植物小, 高 6—14 厘米, 纤细无毛。根状茎直立而短, 其下生出纤细的和鬚状的根, 其上具有膜质的鳞片, 地下茎匍匐伸长。每株有 1 或 2, 稀 3 或 4 根不分枝的具花的茎, 每茎具单花, 常在靠近中部具一个卵形或三角形的短 (1—4 毫米) 而无毛的茎叶 (其基部具有多数的长约 1 毫米的铁锈色的流苏毛, 有的结合成小片状膜)。基叶少, 大多是每株 2 叶, 叶柄纤细, 长 1.5—3 厘米, 超过叶片长度约 2 倍, 叶片圆形或宽卵状圆形, 长宽皆 1.2—2.2 厘米 (稀 3.4 厘米), 顶部钝, 具小短尖, 基部心脏形, 全缘, 基部的弯缺甚深, 干后呈纸质, 上面具 7 脉, 下面脉不显。花萼管为短陀螺状, 萼片急骤反折, 宿存, 披针状长圆形, 约 3 毫米长, 1.2 毫米宽, 具 3 脉, 具褐色小点, 边缘薄而全缘, 顶部急尖或渐尖或仅仅略钝。花冠白色, 干后呈褐色小点, 宽 8—12 毫米; 花瓣平展, 约 4.5—5 毫米长, 1.8—2 毫米宽; 花瓣倒披针形具 1 或 3 脉, 花期后脱落, 上部急尖或渐尖, 全缘, 下部具长流苏状毛 (长 1—1.2 毫米), 向下逐步渐狭成为比萼片略短之爪部, 花瓣片近基部或以下具 2 绿色长圆形蜜腺。退化雄蕊宽匙形, 扁平, 与花瓣之爪部等长, 约 2 毫米长, 2.4 毫米宽, 在退化雄蕊上部具三浅裂, 其深度为全长的 $\frac{1}{3}$ 或 $\frac{1}{4}$, 中间裂片较两侧裂片狭, 后者全缘或具细圆齿。子房卵状, 长约 3.5 毫米, 较浅地陷入花萼管内; 花柱长约 1—1.2 毫米, 具 3 明显长圆形后来反折的柱头。果实 (未成熟) 呈顶基扁的三角形, 各角略增厚。

本新种与 *Parnassia farreri* W. E. Evans 甚近, 但其区别在于: 叶较大, 叶柄及叶片的比例不同, 茎叶无柄但叶基非心脏形; 花瓣顶部急尖或渐尖, 而非圆钝, 向下则逐步渐狭而非急骤收缩为爪部; 退化小蕊顶端是三浅裂而非全缘或不明显的具弯的顶端; 以及子房具明显的花柱而非缺如。

Parnassia Yui sp. nov. (Pl. XXXIII, 2, Fig. 1—6)

(Sect. ***Nectarotrilobus*** Drude)

Planta parva 6—14 cm. alta gracilis glaberrima. Rhizoma verticale breve infra radicibus tenuibus et fibrosis praeditum supra squamis membranaceis onustum, stolones hypogaeos repentes elongatos gerens. Caules floriferi 1 vel 2 rarius 3 vel 4 simplices uniflori saepe circ. medium folium unicum ovatum vel delto-ovatum parvum 1—4 mm. longum sessile, (basi fimbriis ferrugineis, numerosis, vix 1 mm. longis in membranam confluentibus vestita) gerentes. Folia basilaria pauca plerumque 2, petiolo gracili 1.5—3 cm. longo laminam circ. duplo superante suffulta; lamina orbiculari vel late ovato-orbiculari, 1.2—2.2 cm. (raro 3.4 cm.) longa et lata, apice obtusa mucronulata basi cordata integra sinu basali valde profundo, in sicco tenuiter papyracea, supra septemnervia subtus nervis inconspicua. Calycis tubus brevis turbinatus, sepalis a tubi fauce argute reflexis, persistentibus lanceolato-oblongis, circ. 3 mm. longis 1.2 mm. latis 3-nerviis, dense fusco-punctulatis, margine tenuibus integerrimis, apice acutis vel vix obtusis. Corolla in vivo alba in sicco fusco-picta diametro 8—12 mm., petalis patentibus circ. 4.5—5 mm. longis

1.8—2 mm. latis, limbo oblanceolato 1- vel 3-nervio, infra vel circa basim nectariis duobus oblongis viridibus praedito, superne acuto vel acuminato integro inferne longe (1—1.2 mm.) fimbriato in ungum quam sepala leviter breviora sensim attenuato, post anthesin deciduis. Stamina calycis segmenta superantia sed petalis breviora, filamentis complanato-filiformibus, deorsum sensim dilatatis mox reflexis, antheris late ellipticis 1 mm. longis lateraliter dehiscentibus delapsis. Staminodia late spathulata plana circ. 2 mm. longa 2.4 mm. lata late stipitata, petalorum ungui subaequilonga, parte superiore tertia vel quatra totius longitudinis trilobata, lobo medio lobis lateralibus integris vel crenulatis angustiore. Ovarium ovoideum breviter immersum, circ. 3.5 mm. longum, stylo circ. 1—1.2 mm. longo, stigmata 3, conspicua, oblonga demum reflexa gerenti. Fructus (immaturus) depresso-trigonus, angulis paulo incrassatis.

Habitat: Under bamboo thickets on the mountain (3000 m. alt.) of north-western Yunnan Province.

Type: Yunnan, Salwin-Kiukiang divide (保江怒江分水岭高黎貢山), north east of Sinpu (新坡) T. T. Yü (俞德浚) 20238—holotype conserved in the Herb. Inst. Bot. Academia Sinica.

This new species is very close to *Parnassia Farreri* W. E. Evans, but differs in the larger leaves, the different proportion between petiol and leaf; the sessile, not cordate leaf-base of the cauline leaf; the acute or acuminate, not rounded apex of petal and the gradually attenuate, not abruptly contracted petal at the base; the three lobed, not entire or obscurely sinuate apex of staminode; and the distinct, style of the ovary.

娇媚梅花草 新种 图版三十三, 2, 图 7—10

植物矮小, 高 3—8 厘米, 纤细, 软弱, 无毛。根状茎短厚, 具多数细长根。基叶聚集, 3—8, 通常 5; 叶片肾形, 膜质, 下面淡绿色, 通常长 9—10 毫米, 宽 8—9 毫米, 顶端具细尖, 上面脉不显, 下面具 3—5 弯曲脉; 叶柄纤细, 比叶片长 2—3 倍, 上面多少具沟, 扩大为灰白色具紫色长斑纹的线形鞘; 茎叶长 2—5 毫米, 半抱茎, 卵状心脏形, 顶部比基叶者尖。花萼直径为 7—8 毫米, 分裂至从基部向上的 1/4 处; 萼片卵状长圆形, 顶部钝, 后来平展, 具单脉, 基部下延。花冠白色, 直径宽 6—10 毫米, 花瓣倒卵状倒披针形, 长度为花萼之 1½ 倍, 达 5.5 毫米长, 3.6 毫米宽, 基部具 3 脉, 干后具密褐色小点, 顶部钝, 无毛, 边缘在基部附近具或多或少的齧蚀状和撕裂状短流苏毛。爪部长 1—1.2 毫米, 宽约 0.5 毫米。雄蕊与萼片等长, 花丝略扁平丝状, 向下端逐渐扩大, 花药椭圆形, 长 0.8 毫米, 侧裂。退化雄蕊扁平, 长 2 毫米, 宽匙形, 退化雄蕊片 1.2 毫米, 比退化雄蕊柄略短, 上部短三浅裂, 裂片全缘, 其长度为退化雄蕊长度之 1/6, 中间裂片较两侧裂片狭。子房卵状, 近乎半上位, 下面 1/3 的部分与萼片相连并陷入萼管中, 顶部骤缩为极短而具三浅裂之花柱。果实不详。

它的习性和花的结构与 *P. chinensis* 在一定程度上相近, 并且在高山上占据相同的生境。我曾试图把它作为 *P. chinensis* 的一个变种, 但是根据花瓣边缘纤毛状态的差别和远为细小的茎叶我方把它作为一个独立的种。

***Parnassia venusta* sp. nov.** (Pl. XXXIII, 2, Fig. 7—10)

(Sect. ***Nectarotrilobus*** Drude)

Planta statura humili 3—8 cm. alta gracilis flaccida glaberrima. Rhizoma crassum

abbreviatum, radicibus numerosis longis filiformibus praeditum. Folia basilaria crebra 3—8, plerumque 5, laminis reniformibus membranaceis, subtus quam supra paulo pallidioribus viridulis, plerumque 9—10 mm. longis 8—9 mm. latis, minute apiculatis, supra nervis inconspicuis, subtus 3—5 arcuatis, petiolis gracilibus laminas 2—3-plo superantibus supra plus minus canaliculatis in vaginam linearem pallidam purpureo-striatam dilatatus, folio caulino 2—5 mm. longo, amplexicauli, ovato-cordiformi, magis acutato. Calyx diametro 7—8 mm., ad quartam partem inferiorem partitus, segmentis ovato-oblongis obtusis demum patentibus uninerviis basi decurrentibus. Corolla alba diametro 6—10 mm., petalis obovato-oblanceolatis, calycem $1\frac{1}{2}$ -plo superantibus usque 5.5 mm. longis ca. 3.6 mm. latis, e basi trinerviis, in sicco dense fusco-punctulatis, apice obtusis nudis marginibus prope basin plus minusve erosis et breviter lacerato-ciliatis nisi ad unguem 1—1.2 mm. longum circ. 0.5 mm. latum. Stamina sepala aequilonga vel longiora, filamentis complanato-filiformibus, deorsum sensim dilatatis, antheris ellipticis 0.8 mm. longis, lateraliter dehiscentibus. Staminodia plana, 2 mm. longa, late spathulata, laminis 1.2 mm. latis, quam stipites paulo brevioribus, superne breviter trilobatis, lobis longitudine staminodiorum sextam partem aequantibus, lobo medio lobis lateralibus integris angustiore. Ovarium ovoideum fere semisuperum, tertia parte inferiore calycis tubo adherens, apice in stylum brevissimum trilobum abrupte contractum. Fructus ignotus.

Habitat: On the grassy slope in the mountain (about 3600—4200 m. alt.) of north-western Yunnan Province.

Specimens examined: Yunnan, Gon Shan Hsien (貢山县), Sawalunba (沙瓦龙巴) (about 28°20' N, 98°33' E) T. T. Yü (俞德浚) no. 22666, Sept. 3, 1938—holotype conserved in the Herb. Inst. Bot. Academia Sinica; Te Chin Hsien (德钦县), Mekong-Salwin divide (怒山), Dokerla (德格拉) (about 28°36' N, 99°37' E) K. M. Feng (馮國楨) no. 6209, Aug. 1, 1940; same locality, K. M. Feng no. 5921, Aug. 4, 1940.

It is allied by habit and floral structure to *Parnassia chinensis* to a certain degree, and occupies the same habitat in the high mountain. I have once tried to assign it as a variety of *Parnassia chinensis* but the difference in the ciliation of petals and much smaller cauline leaves lead me to consider it as a distinct species.



图1. 宝兴梅花草 *Parnassia labiata* sp. nov. (1—8):

1. 植株 $\times 1/2$, 2. 叶背面 $\times 2.5$, 3. 花 $\times 2.5$, 4. 萼片 $\times 5$, 5. 花瓣 $\times 5$, 6. 退化雄蕊 $\times 5$ 7. 子房横剖面 $\times 5$, 8. 果实 $\times 5$ 。

喜沙梅花草 *Parnassia davidii* Franch var. *arenicola* var. nov. (9):

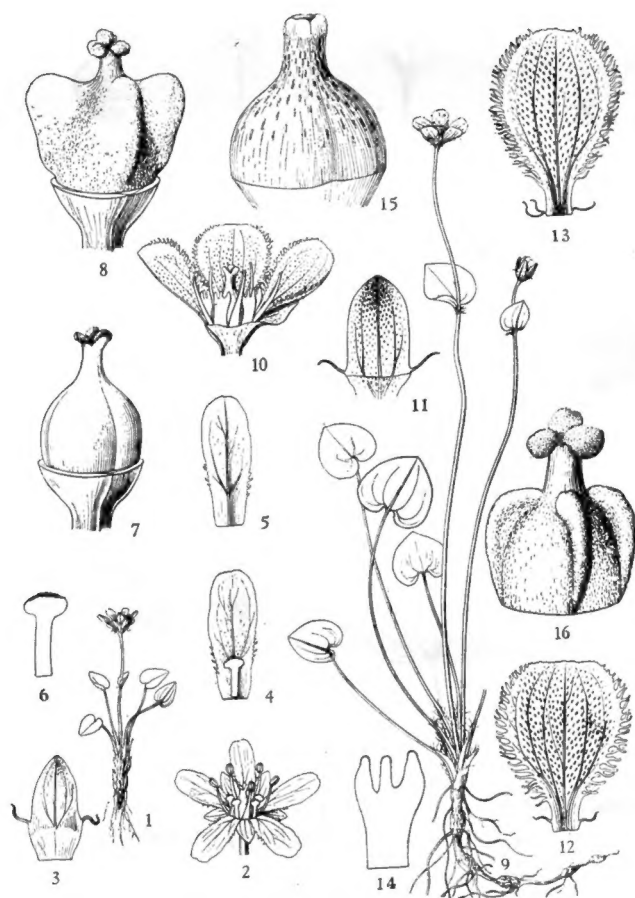
9. 叶 $\times 1/2$ 。

图2. 俞氏梅花草 *Parnassia Yui* sp. nov. (1—6):

1. 植株 $\times 1/2$, 2. 花 $\times 3$, 3. 萼片 $\times 3$, 4. 花瓣 $\times 3$, 5. 退化雄蕊 $\times 3$, 6. 果实 $\times 3$ 。

嬌媚梅花草 *Parnassia venusta* sp. nov. (7—10):

7. 植株 $\times 1/2$, 8. 花 $\times 1.5$, 9. 花瓣 $\times 3$, 10. 退化雄蕊 $\times 3$ 。



云南梅花草长柄 变种 *Parnassia yunnanensis* var. *longistipitata* var. nov. (1—8):

1. 植株×1/2, 2. 花×1.5, 3. 萼片×3, 4. 花瓣×3, 5. 花瓣×3, 6. 退化雄蕊×6, 7. 子房×6, 8. 果实×6。

中国梅花草峨眉 变种 *Parnassia chinensis* Franch var. *sechuanensis* var. nov. (9—15):

9. 全株×1/2, 10. 花×1.5, 11. 萼片×3, 12. 花瓣×3, 13. 花瓣×3, 14. 退化雄蕊×6, 15. 子房×6, 16. 果实×3。